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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,096	12/31/2000	Walter R. Thorson	778.044US1	8253

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EXAMINER

NGUYEN, TU X

ART UNIT PAPER NUMBER

2684

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,096

Applicant(s)

THORSON ET AL

Examiner

Tu X Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 53-73 is/are pending in the application.
- 4a) Of the above claim(s) 21-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 53-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments with respect to claims 1, 53 and 73, have been considered but are moot in view of the new ground(s) of rejection.

Applicant argue, amendment page 8, 2nd paragraph, that "it is not clear how Struhsaker et al. describes the claimed modules configurable to operate as a standalone single-sector base station". On the contrary, the claim limitations do not provide in detail how the modules configurable to operate as a standalone single-sector base station to distinguish from the cited reference.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-7, 53-56, 58-59, are rejected under 35 U.S.C. 103(a) as being unpatentable over Struhsaker et al. (US Patent 6,188,912) in view of Ishii et al. (US Patent 6,643,524).

Regarding claims 1 and 53, Struhsaker et al. disclose a wireless communication system, comprising:

a plurality of base station transceiver modules, each base station transceiver module configurable to operate as a standalone single-sector base station transceiver

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(see col.5 lines 49-62, "complete subscribers-system, one antenna sector" corresponds to "standalone single-sector").

A backhaul interface module in communication with the base station transceiver modules and configured to distribute received data to the plurality of base station transceiver modules (see 3 lines 1-31).

Struhsaker et al. fail to disclose serial link between base stations.

Ishii et al. disclose serial link between base stations (see col.2 lines 5-11).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Struhsaker with the above teaching of Ishii et al. in order add base stations serially to extending coverage area.

Regarding claim 73, the modified Struhsaker et al. disclose everything as claim 1 above. More specifically, the modified Struhsaker et al. disclose each base station transceiver module to access the RF transceiver chain of other base station transceiver modules (see col.1 lines 52 through col.2 line 11).

Regarding claims 2 and 54, Struhsaker et al. disclose controlled impedance media (see col.11 lines 37-45).

Regarding claims 3 and 55, Struhsaker et al. disclose an optical interface (see col.10 lines 1-6).

Regarding claims 4 and 56, the modified Struhsaker et al. disclose the backhaul interface module comprises a T1/E1 interface (see col.3 lines 20-21).

Regarding claims 6 and 58, the modified Struhsaker et al. disclose the backhaul interface module is incorporated in the base station transceiver modules (see col.3 lines 20-31).

Regarding claims 7 and 59, Struhsaker et al. disclose a system interface unit operatively coupled to at least one base station transceiver module via the HSSL (see col.9-10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-20 and 60-72, are rejected under 35 U.S.C. 103(a) as being unpatentable over Struhsaker et al., in view of Ishii et al. and further in view of Dajer et al. (US Patent 6,587,448).

Regarding claims 12-13, 19-20 and 71-72, the combined Struhsaker et al. and Ishii et al. fail to disclose the base station transceiver modules are arranged in CDMA three-sector, six-carrier configuration.

Dajer et al. disclose base station transceiver modules are arranged in CDMA three-sector, six-carrier configuration (see col.7 lines 20-35). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Struhsaker with the above teaching of Dajer in order

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to provide base station modules configuration are arranged in any combinations between sector and carrier.

Regarding claims 8-11, 14-18 and 60-70, the combined Struhsaker et al. and Ishii et al. fail to disclose specifically base station transceiver modules are arranged in two-sector, one-carrier configuration; one-sector, nine-carrier configuration; one-sector, twelve-carrier configuration. However, Dajer et al. mention any desired numbers of sectors and carrier is applicable (see col.11 lines 50-60). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Struhsaker with the above teaching of Dajer et al. to provide base station modules configuration are arranged in any combinations between sector and carrier.

6. Claims 5 and 57, are rejected under 35 U.S.C. 103(a) as being unpatentable over Struhsaker et al, in view of Ishii et al. and further in view of Mahany et al. (US Patent 5,949,776).

Regarding claims 5 and 57, the modified Struhsaker et al. fail to disclose a 10/100BaseTX interface.

Mahany et al. disclose 10/100BaseTX interface (see col.26 lines 16-40). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Struhsaker et al. with the above teaching of Mahany in order to provide industrial standard wired LAN Ethernet protocol.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

May 14, 2004


NAY MAUNG

SUPERVISORY PATENT EXAMINER